Ms. Deborah L. Calderazzo
Allegheny Ludlum Corporation
100 River Road
Brakenridge, IN 15014

Re: **065-11398**
First Administrative Amendment to
Part 70 T 065-7593-00014

Dear Ms. Calderazzo:

Allegheny Ludlum Corporation was issued Part 70 operating permit T 065-7593-00014 on July 13, 1999 for a stationary metal heat treating and cold rolled steel sheet source. An application to modify the source was received on August 13, 1999.

On August 13, 1999, Allegheny Ludlum Corporation submitted an application to the OAM requesting to add low NOx burners with flue gas recirculation to the existing No. 12 A&P Line Annealing furnace to increase the capacity of the furnace from 40.0 million British thermal units per hour to 69.0 million British thermal units per hour. There is no increase in production or emissions from other operations as a result of this change. The only increase in emissions will be from combustion. Allegheny Ludlum Corporation also requests that liquid propane gas be removed from the description of all combustion sources in the permit, since liquid propane gas will not be used as a backup fuel at any combustion unit at this source. There is no change in the potential to emit as a result of removing liquid propane gas from the permit. The responsible official has been changed to Mr. David T. Moses. This Administrative Amendment will incorporate the modification into the issued Part 70 Operating permit and give the source approval to operate the modification. Pursuant to 326 IAC 2-7-10.5 the following emission units were approved for construction at this source under Minor Source Modification 065-11243:

One (1) No. 12 A&P Line Annealing Furnace, identified as S002A, fired by natural gas and exhausting to fugitive emission point P005, maximum capacity: 27 tons of steel per hour, and increasing maximum heat input capacity from 40.0 million British thermal units per hour to 69.0 million British thermal units per hour by adding low NOx burners with flue gas recirculation.

Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary metal heat treating and cold rolled steel sheet source.

Responsible Official:	~~Paul M. Ferrara~~ **David T. Moses**
Source Address:	State Route 38 West, New Castle, Indiana 47362
Mailing Address:	State Route 38 West, New Castle, Indiana 47362
SIC Code:	3316 and 3398
County Location:	Henry
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major, under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) No. 11 A&P Annealing Furnace, identified as S001A, modified in 1998, fired by natural gas ~~and using liquid propane gas as a backup fuel~~ and exhausting to fugitive emission point P001, maximum capacity: 27 tons of steel per hour, and maximum heat input capacity: 60 million British thermal units per hour.

(b) One (1) No. 12 A&P Annealing Furnace, identified as S002A, constructed in 1967, fired by natural gas ~~and using liquid propane gas as a backup fuel~~ and exhausting to fugitive emission point P005, **using low NOx burners with flue gas recirculation with a heat input capacity of 29.0 million British thermal units per hour,** maximum capacity: 27 tons of steel per hour, and **total** maximum heat input capacity: ~~40~~ **69.0** million British thermal units per hour.

(c) One (1) No. 11 A&P Line Jet Cool Unit, identified as S001B, constructed in 1981, using a baghouse identified as D001 as control, and exhausting to stack P002, maximum capacity: 27 tons of steel per hour.

(d) One (1) No. 11 A&P Line Shot Blast Unit, identified as S001C, constructed in 1967 and replaced in 1995, using a baghouse identified as D002 as control, and exhausting to stack P003, maximum capacity: 27 tons of steel per hour.

(e) One (1) No. 11 A&P Acid Pickling Facility, identified as S001D, constructed in 1967, using a chemical scrubber identified as D003 as control, and exhausting to stack P004, maximum capacity: 27 tons of steel per hour.

(f) One (1) No. 12 A&P Kolene Rinse, identified as S002C, constructed in 1967 and replaced in 1996, using a chemical scrubber identified as D003 as control, and exhausting to stack P004, maximum capacity: 27 tons of steel per hour.

(g) One (1) No. 12 A&P Line Acid Pickling Facility, identified as S002D, constructed in 1967, using a chemical scrubber identified as D003 as control, and exhausting to stack P004, maximum capacity: 27 tons of steel per hour.

(h) One (1) North Boiler, identified as S006, installed in 1966, fired by natural gas, ~~using liquid propane gas as a backup fuel~~ and exhausting to stack P011, maximum heat input capacity: 20.92 million British thermal units per hour.

(i) One (1) Middle Boiler, identified as S007, installed in 1966, fired by natural gas ~~using liquid propane gas as a backup fuel~~ and exhausting to stack P012, maximum heat input capacity: 10.46 million British thermal units per hour.

(j) One (1) South Boiler, identified as S008, installed in 1966, fired by natural gas ~~using liquid propane gas as a backup fuel~~ and exhausting to stack P013, maximum heat input capacity: 10.46 million British thermal units per hour.

(k) One (1) Strip Grinder, identified as S003A, composed of four (4) grinding heads and four (4) eliminators, constructed in 1967, using oil mist eliminators identified as D004, D005 and D006 as control, and exhausting to stack P007, maximum capacity: 25 tons of steel per hour.

(l) One (1) Strip Polisher, identified as S003B, constructed in 1967, and exhausting to stack P008, maximum capacity: 25 tons of steel per hour.

(m) One (1) Z-Mill, identified as S004, constructed in 1967, using an oil mist eliminator identified as D007 as control, and exhausting to stack P009, maximum capacity: 35 tons of steel per hour.

(n) One (1) Temper Mill, identified as S005, constructed in 1967, and exhausting to fugitive emission point P010, maximum capacity: 50 tons of steel per hour.

(o) Three (3) Parts Cleaners, identified as S009A, constructed between 1980 and 1988, using a sealed reservoir as control, and exhausting to fugitive emission point P014, maximum throughput: 0.5 gallons of mineral spirits per hour.

(p) One (1) Parts Cleaner, identified as S009B, constructed between 1980 and 1988, using a sealed reservoir as control, and exhausting to fugitive emission point P015, maximum throughput: 0.5 gallons of kerosene per hour.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(h) One (1) North Boiler, identified as S006, installed in 1966, fired by natural gas, ~~using liquid propane gas as a backup fuel~~ and exhausting to stack P011, maximum heat input capacity: 20.92 million British thermal units per hour.

(i) One (1) Middle Boiler, identified as S007, installed in 1966, fired by natural gas ~~using liquid propane gas as a backup fuel~~ and exhausting to stack P012, maximum heat input capacity: 10.46 million British thermal units per hour.

(j) One (1) South Boiler, identified as S008, installed in 1966, fired by natural gas ~~using liquid propane gas as a backup fuel~~ and exhausting to stack P013, maximum heat input capacity: 10.46 million British thermal units per hour.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact CarrieAnn Ortolani, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 516-691-3395 or in Indiana at 1-800-451-6027 (ext 516-691-3395).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
CAO/MES
cc: File - Henry County
U.S. EPA, Region V
Air Compliance Section Inspector - Warren Greiling
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT
and ENHANCED NEW SOURCE REVIEW
OFFICE OF AIR MANAGEMENT

Allegheny Ludlum Corporation
State Route 38 West
New Castle, Indiana 47362

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 065-7593-00014	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: July 13, 1999

First Minor Source Modification 065-11243-00014

First Administrative Amendment 065-11398-00014	Pages Affected: 6, 7, 38 and 39
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary metal heat treating and cold rolled steel sheet source.

Responsible Official:	David T. Moses
Source Address:	State Route 38 West, New Castle, Indiana 47362
Mailing Address:	State Route 38 West, New Castle, Indiana 47362
SIC Code:	3316 and 3398
County Location:	Henry
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major, under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) No. 11 A&P Annealing Furnace, identified as S001A, modified in 1998, fired by natural gas and exhausting to fugitive emission point P001, maximum capacity: 27 tons of steel per hour, and maximum heat input capacity: 60 million British thermal units per hour.

(b) One (1) No. 12 A&P Annealing Furnace, identified as S002A, constructed in 1967, fired by natural gas and exhausting to fugitive emission point P005, using low NOx burners with flue gas recirculation with a heat input capacity of 29.0 million British thermal units per hour, maximum capacity: 27 tons of steel per hour, and total maximum heat input capacity: 69.0 million British thermal units per hour.

(c) One (1) No. 11 A&P Line Jet Cool Unit, identified as S001B, constructed in 1981, using a baghouse identified as D001 as control, and exhausting to stack P002, maximum capacity: 27 tons of steel per hour.

(d) One (1) No. 11 A&P Line Shot Blast Unit, identified as S001C, constructed in 1967 and replaced in 1995, using a baghouse identified as D002 as control, and exhausting to stack P003, maximum capacity: 27 tons of steel per hour.

(e) One (1) No. 11 A&P Acid Pickling Facility, identified as S001D, constructed in 1967, using a chemical scrubber identified as D003 as control, and exhausting to stack P004, maximum capacity: 27 tons of steel per hour.

(f) One (1) No. 12 A&P Kolene Rinse, identified as S002C, constructed in 1967 and replaced in 1996, using a chemical scrubber identified as D003 as control, and exhausting to stack P004, maximum capacity: 27 tons of steel per hour.

(g) One (1) No. 12 A&P Line Acid Pickling Facility, identified as S002D, constructed in 1967, using a chemical scrubber identified as D003 as control, and exhausting to stack P004, maximum capacity: 27 tons of steel per hour.

(h) One (1) North Boiler, identified as S006, installed in 1966, fired by natural gas and exhausting to stack P011, maximum heat input capacity: 20.92 million British thermal units per hour.

(i) One (1) Middle Boiler, identified as S007, installed in 1966, fired by natural gas and exhausting to stack P012, maximum heat input capacity: 10.46 million British thermal units per hour.

(j) One (1) South Boiler, identified as S008, installed in 1966, fired by natural gas and exhausting to stack P013, maximum heat input capacity: 10.46 million British thermal units per hour.

(k) One (1) Strip Grinder, identified as S003A, composed of four (4) grinding heads and four (4) eliminators, constructed in 1967, using oil mist eliminators identified as D004, D005 and D006 as control, and exhausting to stack P007, maximum capacity: 25 tons of steel per hour.

(l) One (1) Strip Polisher, identified as S003B, constructed in 1967, and exhausting to stack P008, maximum capacity: 25 tons of steel per hour.

(m) One (1) Z-Mill, identified as S004, constructed in 1967, using an oil mist eliminator identified as D007 as control, and exhausting to stack P009, maximum capacity: 35 tons of steel per hour.

(n) One (1) Temper Mill, identified as S005, constructed in 1967, and exhausting to fugitive emission point P010, maximum capacity: 50 tons of steel per hour.

(o) Three (3) Parts Cleaners, identified as S009A, constructed between 1980 and 1988, using a sealed reservoir as control, and exhausting to fugitive emission point P014, maximum throughput: 0.5 gallons of mineral spirits per hour.

(p) One (1) Parts Cleaner, identified as S009B, constructed between 1980 and 1988, using a sealed reservoir as control, and exhausting to fugitive emission point P015, maximum throughput: 0.5 gallons of kerosene per hour.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(h) One (1) North Boiler, identified as S006, installed in 1966, fired by natural gas and exhausting to stack P011, maximum heat input capacity: 20.92 million British thermal units per hour.

(i) One (1) Middle Boiler, identified as S007, installed in 1966, fired by natural gas and exhausting to stack P012, maximum heat input capacity: 10.46 million British thermal units per hour.

(j) One (1) South Boiler, identified as S008, installed in 1966, fired by natural gas and exhausting to stack P013, maximum heat input capacity: 10.46 million British thermal units per hour.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-2-3]

The North Boiler, Middle Boiler, and South Boiler installed in 1966 shall be limited to PM emissions of 0.708 pound of PM per million British thermal units. This limit is based on the following equation:

$$Pt = (C \times a \times h) / (76.5 \times Q^{0.75} \times N^{0.25})$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input.

C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic feet per minute meter for a period not to exceed a sixty (60) minute time period.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 million British thermal units per hour heat input.

h = Stack height in feet. If a number of stacks of different heights exist, the average stack height will be computed using a weighted average of stack heights.

$$Pt = (50\ \mu g/m^3 \times 0.67 \times 35ft) / (76.5 \times 41.84^{0.75} \times 3^{0.25}) = 0.708\ lbs\ PM / MMBtu$$

Compliance Determination Requirements

D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be

determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.3 Reporting Requirements

The Permittee shall certify within thirty (30) days after the end of the quarter being reported, using the reporting form located at the end of this permit, or its equivalent, which fuels were fired in the boilers during the report period and the dates of use.